

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	39
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals				
DWR ID	DWR_RD1602_01_s _ 2012_39				
Comment Code					
Inspector Comment					
The LMA has all the O&M manuals.					

No Photos

LM Start	0.00	Rating **	A	Issue No.	77
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment				
DWR ID	DWR_RD1602_01_s _ 2012_77				
Comment Code					
Inspector Comment					
The LMA has enough flood materials in case of an incident.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	97
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training				
DWR ID	DWR_RD1602_01_s_2012_97				
Comment Code					
Inspector Comment					
The LMA has solid understanding and most of them have flood preparedness training. They will have more training this year with other districts.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	40
LM End	6.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.476615 °	37.429124 °
				-121.083847 °	-121.029743 °
DWR ID	DWR_RD1602_01_s_2018_40				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.00	Rating **	M	Issue No.	55
LM End	6.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.476616 °	37.429116 °
				-121.083847 °	-121.029750 °
DWR ID	DWR_RD1602_01_s_2018_55				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.09	Rating **	M	Issue No.	60
LM End	0.11	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.477161 °	37.477299 °
				-121.082504 °	-121.082084 °
DWR ID	DWR_RD1602_01_s_2018_60				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_60_20180323_00100.jpg



Looking upstream at trees on landward slope.

LM Start	0.13	Rating **	M	Issue No.	73
LM End	6.23	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.477229 °	37.429111 °
				-121.081894 °	-121.029755 °
DWR ID	DWR_RD1602_01_s_2018_73				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					
Need to control veg. on levee crown and add appropriate gravel					

Photo 1 of 1 : SP_2018_RD1602_110_73_20180323_00101.jpg



Looking upstream of levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.14	Rating **	M	Issue No.	26
LM End	1.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.477291 °	37.477498 °
				-121.081613 °	-121.058624 °
DWR ID	DWR_RD1602_01_f_2017_26				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_26_20180307_00009.jpg



View of the waterside vegetation. Fall 2017

LM Start	0.14	Rating **	M	Issue No.	27
LM End	1.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.477292 °	37.477499 °
				-121.081613 °	-121.058624 °
DWR ID	DWR_RD1602_01_f_2017_27				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_27_20180307_00010.jpg



View of the vegetation on the landside of the levee. Fall 2017

LM Start	0.18	Rating **	M	Issue No.	20
LM End	0.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.477575 °	37.477575 °
				-121.080943 °	-121.080943 °
DWR ID	DWR_RD1602_01_f_2016_20				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.20	Rating **	M	Issue No.	28
LM End	0.20	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.477706 °	37.477706 °
				-121.080674 °	-121.080674 °
DWR ID	DWR_RD1602_01_f_2015_28				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : SP_2018_RD1602_110_28_20180307_00011.jpg



Updated picture of the rodent hole on the waterside of the levee during spring 2016 inspection.

LM Start	0.20	Rating **	M	Issue No.	28 (cont)
LM End	0.20	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2018_RD1602_110_28_20180307_00012.jpg



A rodent hole was found on the waterside of the levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.26	Rating **	M	Issue No.	29
LM End	0.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.478138 °	37.478138 °
				-121.079810 °	-121.079810 °
DWR ID	DWR_RD1602_01_f_2017_29				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : SP_2018_RD1602_110_29_20180307_00013.jpg



View of a rodent hole on the waterside of the levee. Fall 2017

LM Start	0.26	Rating **	M	Issue No.	29 (cont)
LM End	0.26	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2018_RD1602_110_29_20180323_00102.jpg



Looking at typical rodent holes on waterward slope. (Spring 2018)

LM Start	0.47	Rating **	M	Issue No.	31
LM End	0.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.479659 °	37.479659 °
				-121.076419 °	-121.076419 °
DWR ID	DWR_RD1602_01_f_2015_31				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.58	Rating **	A/W	Issue No.	200
LM End	0.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.480182 °	37.480182 °
				-121.074765 °	-121.074765 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51325
DS_ID:20215
EP_NO: N/A
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed a cover has been added to the CMP riser. (O. Magana - DWR UCIP)10/01/2013 Open 60-inch CMP riser on WS needs lid as it's depth may be a hazard to the public. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 16-inch steel drainage pipe through levee, 11.3 feet below crown. Slide gate in 60-inch corrugated metal pipe (CMP) riser located on the waterside (WS). Concrete inlet is approximately 110 feet west of the levee crown or 110 feet off landside (LS) toe next to roadway. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].
FS Date: 11/18/2016

LM Start	0.58	Rating **	A/W	Issue No.	200 (cont)
LM End	0.58	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51325_36702.jpg



60-inch CMP riser on WS shoulder.

Photo 2 of 3 : UCIP_SP_2018_51325_36701.jpg



CMP riser with slide gate on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.58	Rating **	A/W	Issue No.	200 (cont)
LM End	0.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.480182 °	37.480182 °
				-121.074765 °	-121.074765 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51325 DS_ID:20215 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed a cover has been added to the CMP riser. (O. Magana - DWR UCIP)10/01/2013 Open 60-inch CMP riser on WS needs lid as it's depth may be a hazard to the public. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 16-inch steel drainage pipe through levee, 11.3 feet below crown. Slide gate in 60-inch corrugated metal pipe (CMP) riser located on the waterside (WS). Concrete inlet is approximately 110 feet west of the levee crown or 110 feet off landside (LS) toe next to roadway. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784]. FS Date: 11/18/2016					

Photo 3 of 3 : UCIP_SP_2018_51325_36700.jpg



Damaged Wooden lid on WS toe.

LM Start	0.64	Rating **	M	Issue No.	30
LM End	0.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.479391 °	37.479391 °
				-121.074168 °	-121.074168 °
DWR ID	DWR_RD1602_01_f_2017_30				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_30_20180307_00014.jpg



View of rodent holes on the waterside slope of the levee. Fall 2017

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.77	Rating **	A/W	Issue No.	202
LM End	0.77	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.477993 °	37.477993 °
				-121.072645 °	-121.072645 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51634
DS_ID:20216
EP_NO: N/A
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed the debris blocking the outlet has been cleared. (O. Magana - DWR UCIP)10/01/2013 Flap gate blocked from functioning by soil buildup on WS toe. Soil should be cleared. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 30-inch square reinforced concrete box culvert through levee, 14.4 feet below crown. Concrete "U" headwall on the waterside (WS) and landside (LS) ends. Slide gate in 6-foot by 7-foot concrete surge box is located on the WS shoulder. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.78), Drawing No. 7-4-1784].
FS Date: 11/18/2016

LM Start	0.77	Rating **	A/W	Issue No.	202 (cont)
LM End	0.77	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51634_36723.jpg



Inlet on LS toe.

Photo 2 of 3 : UCIP_SP_2018_51634_36722.jpg



Slide gate in concrete box on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	0.77	Rating **	A/W	Issue No.	202 (cont)
LM End	0.77	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.477993 °	37.477993 °
				-121.072645 °	-121.072645 °
DWR ID					

Photo 3 of 3 : UCIP_SP_2018_51634_36721.jpg



Concrete inlet on LS toe.

Comment Code					
Inspector Comment					
FS_ID:51634 DS_ID:20216 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed the debris blocking the outlet has been cleared. (O. Magana - DWR UCIP)10/01/2013 Flap gate blocked from functioning by soil buildup on WS toe. Soil should be cleared. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 30-inch square reinforced concrete box culvert through levee, 14.4 feet below crown. Concrete "U" headwall on the waterside (WS) and landside (LS) ends. Slide gate in 6-foot by 7-foot concrete surge box is located on the WS shoulder. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.78), Drawing No. 7-4-1784]. FS Date: 11/18/2016					

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.00	Rating **	M	Issue No.	203
LM End	1.00	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.478816 °	37.478816 °
				-121.068780 °	-121.068780 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51636
DS_ID:20217
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS but pipe is currently not connected to pump. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned and if so should be done so properly. Flapgate missing. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pumps on the pump platform are located on the landside (LS). Siphon breaker in 24-inch corrugated metal pipe (CMP) riser is located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end.
[Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].
FS Date: 11/18/2016

LM Start	1.00	Rating **	M	Issue No.	203 (cont)
LM End	1.00	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51636_36758.jpg



Pumping plant on LS toe. Pipe visible under walkway.

Photo 2 of 3 : UCIP_SP_2018_51636_36757.jpg



Siphon breaker in 24-inch CMP riser on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.00	Rating **	M	Issue No.	203 (cont)	
LM End	1.00	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.478816 °	37.478816 °	
				-121.068780 °	-121.068780 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51636 DS_ID:20217 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS but pipe is currently not connected to pump. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned and if so should be done so properly. Flapgate missing. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pumps on the pump platform are located on the landside (LS). Siphon breaker in 24-inch corrugated metal pipe (CMP) riser is located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784]. FS Date: 11/18/2016						

Photo 3 of 3 : UCIP_SP_2018_51636_36756.jpg



Siphon breaker in 24-inch CMP riser on WS shoulder.

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Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.00	Rating **	M	Issue No.	204
LM End	1.00	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.478817 °	37.478817 °
				-121.068773 °	-121.068773 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51637
DS_ID:20219
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned siphon breakers covered in soil and flapgate missing. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 2 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pump on pump platform located on the landside (LS). Siphon breaker in 24-inch riser located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].
FS Date: 11/18/2016

LM Start	1.00	Rating **	M	Issue No.	204 (cont)
LM End	1.00	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51637_36772.jpg



Pipe visible under walkway at puming plant on LS toe.

Photo 2 of 3 : UCIP_SP_2018_51637_36771.jpg



Siphon breaker covered in soil at CMP riser on WS shoulder.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.00	Rating **	M	Issue No.	204 (cont)
LM End	1.00	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.478817 °	37.478817 °
				-121.068773 °	-121.068773 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51637
DS_ID:20219
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned siphon breakers covered in soil and flapgate missing. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 2 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pump on pump platform located on the landside (LS). Siphon breaker in 24-inch riser located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].
FS Date: 11/18/2016

Photo 3 of 3 : UCIP_SP_2018_51637_36770.jpg



Concrete headwall on WS toe with missing flapgate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	205
LM End	1.02	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.478779 °	37.478779 °
				-121.068508 °	-121.068508 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51329

DS_ID:20218

EP_NO: N/A

Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 11/18/2016 Same as previous inspection headwall on the WS toe has separated from pipe and flap gate is still missing.

Erosion around concrete headwall and undermined WS slope are visible from WS. The slope undermined appears to have progressed but no photos were taken due to the dense vegetation covering area.

According to Tony Martinez, LMA representative, the WS concrete headwall has been detached since 2008/2009. LMA has been in contact with CVFPB, DWR, and USACE regarding this site. (O. Magana - DWR UCIP)10/01/2013 Headwall on WS toe separated from pipe. Erosion around concrete headwall and undermined at WS toe. Flap gate missing from WS toe headwall. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 30-inch square reinforced concrete box culvert through levee, 25.4 feet below crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in concrete surge box located on the WS slope. A 5-foot by 5-foot concrete box is located on LS toe. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.02), Drawing No. 7-4-1784]. FS Date: 11/18/2016

LM Start	1.02	Rating **	U	Issue No.	205 (cont)
LM End	1.02	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51329_36786.jpg



Grated inlet and 5'X5' concrete box on LS toe.

Photo 2 of 3 : UCIP_SP_2018_51329_36785.jpg



Grated inlet at LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	205 (cont)
LM End	1.02	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.478779 °	37.478779 °
				-121.068508 °	-121.068508 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51329
DS_ID:20218
EP_NO: N/A
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Same as previous inspection headwall on the WS toe has separated from pipe and flap gate is still missing. Erosion around concrete headwall and undermined WS slope are visible from WS. The slope undermined appears to have progressed but no photos were taken due to the dense vegetation covering area. According to Tony Martinez, LMA representative, the WS concrete headwall has been detached since 2008/2009. LMA has been in contact with CVFPB, DWR, and USACE regarding this site. (O. Magana - DWR UCIP)10/01/2013 Headwall on WS toe separated from pipe. Erosion around concrete headwall and undermined at WS toe. Flap gate missing from WS toe headwall. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 30-inch square reinforced concrete box culvert through levee, 25.4 feet below crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in concrete surge box located on the WS slope. A 5-foot by 5-foot concrete box is located on LS toe. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.02), Drawing No. 7-4-1784]. FS Date: 11/18/2016

Photo 3 of 3 : UCIP_SP_2018_51329_36789.jpg



Slide gate in concrete riser next to shed on WS shoulder.

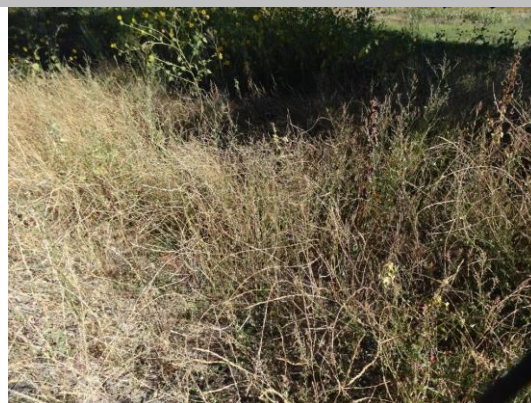
LM Start	1.05	Rating **	M	Issue No.	2
LM End	1.05	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.478567 °	37.478567 °
				-121.067847 °	-121.067847 °
DWR ID	RD1602U01RM97.68				

Comment Code

Inspector Comment

09/20/2017: The erosion was discovered during the spring levee inspection. The size of the erosion is roughly estimated due to dense vegetation at the site. [2017 Site ID:RD1602U01RM97.68]

Photo 1 of 4 : SP_2018_RD1602_110_2_20180307_00002.jpg



Close view of the erosion. The erosion is covered by dense vegetation at the site.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.05	Rating **	M	Issue No.	2 (cont)	
LM End	1.05	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.478567 °		37.478567 °
				-121.067847 °		-121.067847 °
DWR ID	RD1602U01RM97.68					
Comment Code						
Inspector Comment						
09/20/2017: The erosion was discovered during the spring levee inspection. The size of the erosion is roughly estimated due to dense vegetation at the site. [2017 Site ID:RD1602U01RM97.68]						

LM Start	1.05	Rating **	M	Issue No.	2 (cont)
LM End	1.05	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : SP_2018_RD1602_110_2_20180307_00003.jpg



Close view of the erosion.

Photo 3 of 4 : SP_2018_RD1602_110_2_20180307_00004.jpg



Looking up at the erosion from the levee toe.

LM Start	1.05	Rating **	M	Issue No.	2 (cont)
LM End	1.05	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : SP_2018_RD1602_110_2_20180307_00005.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.13	Rating **	M	Issue No.	76
LM End	1.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.478317 °	37.478257 °
				-121.066562 °	-121.065761 °
DWR ID	DWR_RD1602_01_s_2018_76				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	1.19	Rating **	M	Issue No.	32
LM End	1.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.478347 °	37.478347 °
				-121.065361 °	-121.065361 °
DWR ID	DWR_RD1602_01_f_2017_32				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	1.25	Rating **	M	Issue No.	78
LM End	1.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.478614 °	37.478614 °
				-121.064490 °	-121.064490 °
DWR ID	DWR_RD1602_01_s_2018_78				
Comment Code					
T4 : Trim trees over roadway to at least 12 feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.57	Rating **	M	Issue No.	33
LM End	1.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.478113 °	37.478113 °
				-121.059287 °	-121.059287 °
DWR ID	DWR_RD1602_01_f_2017_33				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_33_20180307_00015.jpg



View of prunings on the landside of the levee.

LM Start	1.79	Rating **	M	Issue No.	34
LM End	2.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.475192 °	37.472106 °
				-121.057957 °	-121.057851 °
DWR ID	DWR_RD1602_01_f_2017_34				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_34_20180307_00016.jpg



View of vegetation on the landside of the levee looking upstream. Fall 2017

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	1.99	Rating **	M	Issue No.	38
LM End	2.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.472347 °	37.466694 °
				-121.057904 °	-121.046188 °
DWR ID	DWR_RD1602_01_f_2017_38				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_38_20180307_00021.jpg



View of vegetation on the waterside of the levee looking upstream. Fall 2017

LM Start	2.29	Rating **	M	Issue No.	79
LM End	2.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.470348 °	37.470348 °
				-121.053987 °	-121.053987 °
DWR ID	DWR_RD1602_01_s_2017_79				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	2.56	Rating **	M	Issue No.	81
LM End	2.56	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.469268 °	37.469268 °
				-121.049413 °	-121.049413 °
DWR ID	DWR_RD1602_01_s_2017_81				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_81_20180307_00047.jpg



View of a rodent hole on the waterside slope of the levee.

LM Start	2.67	Rating **	M	Issue No.	19
LM End	2.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.468212 °	37.468212 °
				-121.048096 °	-121.048096 °
DWR ID	DWR_RD1602_01_s_2016_19				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_19_20180307_00006.jpg



View of rodent holes on the waterside of the levee.

LM Start	2.79	Rating **	M	Issue No.	41
LM End	2.79	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.466887 °	37.466887 °
				-121.046460 °	-121.046460 °
DWR ID	DWR_RD1602_01_f_2016_41				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_41_20180307_00022.jpg



View of rodent holes on the waterside slope of the levee. Fall 2016

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	2.82	Rating **	M	Issue No.	44
LM End	2.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.466645 °	37.466645 °
				-121.046148 °	-121.046148 °
DWR ID	DWR_RD1602_01_f_2016_44				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_44_20180307_00025.jpg



View of redoent holes on the landside of the levee.

LM Start	2.85	Rating **	M	Issue No.	46
LM End	2.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.466294 °	37.466294 °
				-121.045693 °	-121.045693 °
DWR ID	DWR_RD1602_01_f_2016_46				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	2.86	Rating **	M	Issue No.	47
LM End	2.86	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.466166 °	37.466166 °
				-121.045527 °	-121.045527 °
DWR ID	DWR_RD1602_01_f_2016_47				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_47_20180307_00027.jpg



View of rodent holes on the waterside of the levee. Fall 2016

LM Start	2.89	Rating **	M	Issue No.	49
LM End	2.89	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.465898 °	37.465898 °
				-121.045209 °	-121.045209 °
DWR ID	DWR_RD1602_01_f_2016_49				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_49_20180307_00029.jpg



View of rodent holes on the waterside slope of the levee. Spring 2017

LM Start	2.95	Rating **	M	Issue No.	51
LM End	2.95	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.465190 °	37.465190 °
				-121.044584 °	-121.044584 °
DWR ID	DWR_RD1602_01_f_2016_51				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_51_20180307_00031.jpg



View of a rodent hole on the waterside of the levee.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	3.16	Rating **	M	Issue No.	25
LM End	3.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.462947 °	37.462947 °
				-121.041967 °	-121.041967 °
DWR ID	DWR_RD1602_01_s_2016_25				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_25_20180307_00008.jpg

View of rodent holes on the waterside toe of the levee looking upstream.
Fall 2016

LM Start	3.32	Rating **	M	Issue No.	56
LM End	3.32	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.460811 °	37.460811 °
				-121.042078 °	-121.042078 °
DWR ID	DWR_RD1602_01_s_2017_56				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_56_20180307_00033.jpg



View of rodent holes on the landside of the levee. Fall 2016

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	3.33	Rating **	M	Issue No.	53
LM End	3.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.460685 °	37.458892 °
				-121.042176 °	-121.043794 °
DWR ID	DWR_RD1602_01_f_2017_53				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	3.43	Rating **	M	Issue No.	57
LM End	3.43	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.459552 °	37.459552 °
				-121.043279 °	-121.043279 °
DWR ID	DWR_RD1602_01_f_2017_57				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_57_20180307_00034.jpg



View of a rodent hole on the waterside of the levee.

LM Start	3.76	Rating **	M	Issue No.	83
LM End	3.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.455414 °	37.455414 °
				-121.043765 °	-121.043765 °
DWR ID	DWR_RD1602_01_s_2017_83				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_83_20180307_00048.jpg



View of a tree trunk on the waterside slope of the levee.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	3.90	Rating **	M	Issue No.	84
LM End	3.90	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.453566 °	37.453566 °
				-121.042376 °	-121.042376 °
DWR ID	DWR_RD1602_01_s_2017_84				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_84_20180307_00049.jpg



View of rodent holes on the waterside of the levee.

LM Start	3.93	Rating **	M	Issue No.	62
LM End	3.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.453216 °	37.453216 °
				-121.042127 °	-121.042127 °
DWR ID	DWR_RD1602_01_s_2012_62				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Significant damage to USACE constructed seepage berm due to human activity.					

Photo 1 of 1 : SP_2018_RD1602_110_62_20180307_00038.jpg



Repair damage to USACE constructed seepage berm by pedestrian and cycle traffic.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	3.96	Rating **	M	Issue No.	85
LM End	3.96	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Crown Surface / Depressions / Rutting		37.452931 °	37.452931 °	
			-121.041863 °	-121.041863 °	
DWR ID	DWR_RD1602_01_s_2017_85				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					

No Photos

LM Start	3.98	Rating **	M	Issue No.	69
LM End	3.98	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.452640 °	37.452640 °	
			-121.041646 °	-121.041646 °	
DWR ID	DWR_RD1602_01_f_2016_69				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	4.02	Rating **	M	Issue No.	58
LM End	4.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.452118 °	37.452118 °	
			-121.041306 °	-121.041306 °	
DWR ID	DWR_RD1602_01_f_2017_58				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_58_20180307_00035.jpg



View of rodent holes on the waterside of the levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	4.24	Rating **	M	Issue No.	71
LM End	4.24	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.449608 °	37.449608 °
				-121.038968 °	-121.038968 °
DWR ID	DWR_RD1602_01_f_2016_71				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	4.35	Rating **	M	Issue No.	88	
LM End	4.35	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.448170 °		37.448170 °
				-121.038072 °		-121.038072 °
DWR ID	DWR_RD1602_01_s_2017_88					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 1 of 1 : SP_2018_RD1602_110_88_20180307_00050.jpg



View of a rodent hole on the waterside slope of the levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	4.48	Rating **	M	Issue No.	90
LM End	4.48	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.446413 °	37.446413 °
				-121.037888 °	-121.037888 °
DWR ID	DWR_RD1602_01_s_2017_90				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

LM Start	4.52	Rating **	M	Issue No.	35
LM End	4.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.445785 °	37.445785 °
				-121.037774 °	-121.037774 °
DWR ID	DWR_RD1602_01_s_2016_35				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_35_20180307_00017.jpg



View of an animal hole on the waterside shoulder of the levee looking downstream.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	4.64	Rating **	M	Issue No.	68
LM End	5.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.444038 °	37.436190 °	
			-121.037963 °	-121.036132 °	
DWR ID	DWR_RD1602_01_f_2017_68				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	4.67	Rating **	M	Issue No.	72
LM End	5.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.443719 °	37.436190 °	
			-121.037902 °	-121.036135 °	
DWR ID	DWR_RD1602_01_f_2017_72				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	4.77	Rating **	M	Issue No.	74
LM End	4.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		37.442465 °	37.442465 °	
			-121.036947 °	-121.036947 °	
DWR ID	DWR_RD1602_01_s_2015_74				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_74_20180307_00045.jpg



View of a rodent hole on the waterside toe of the levee.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.09	Rating **	M	Issue No.	199
LM End	5.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.438165 °	37.438165 °
				-121.037073 °	-121.037073 °
DWR ID	DWR_RD1602_01_s_2014_199				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_199_20180307_00053.jpg



Rodent holes were found on the waterside toe of the levee looking upstream.

LM Start	5.13	Rating **	M	Issue No.	92
LM End	5.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.437527 °	37.437527 °
				-121.036967 °	-121.036967 °
DWR ID	DWR_RD1602_01_s_2017_92				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_92_20180307_00052.jpg



View of a rodent hole on the waterside shoulder of the levee looking downstream.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.18	Rating **	U	Issue No.	48
LM End	5.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.436785 °	37.436785 °
				-121.036593 °	-121.036593 °
DWR ID	DWR_RD1602_01_s_2016_48				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent holes possibly worsen by dogs.					

Photo 1 of 1 : SP_2018_RD1602_110_48_20180307_00028.jpg



View of rodent holes on the waterside of the levee looking downstream.

LM Start	5.19	Rating **	M	Issue No.	209	
LM End	5.19	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.436748 °	37.436748 °	
				-121.036597 °	-121.036597 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51336 DS_ID:20208 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as previous inspection soil and debris prevent flap gate from properly fuctioning and slide gate won't close due to sediment build up. Crossing has been downgraded from Urgent to Non-Urgent due to no pipe or levee integrity issues observed during the site visit. Need to contact owner to determine status of crossing. If crossing is no longer in use owner will need to coordinate with CVFPB to properly abandon or remove according to Title 23 requirements. (O. Magana - DWR UCIP)10/01/2013 Soil and debris prevent flapgate from proper function. Slide gate won't close completely due to sediment buildup. CMP riser needs cover. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 24-inch steel pipe through levee, 11.6 feet below crown. Concrete headwall on the landside (LS) end. Concrete "U" headwall and flap gate located on the waterside (WS) end. Slide gate in 60-inch corrugated metal pipe (CMP) riser is located on the WS slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.23), Drawing No. 7-4-1784]. FS Date: 11/18/2016						

Photo 1 of 3 : UCIP_SP_2018_51336_36822.jpg



Slide gate in CMP riser on WS slope. Outlet visible under tree in background.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.19	Rating **	M	Issue No.	209 (cont)
LM End	5.19	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		37.436748 °	37.436748 °	
			-121.036597 °	-121.036597 °	
DWR ID					

Comment Code

Inspector Comment

FS_ID:51336
DS_ID:20208
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Same as previous inspection soil and debris prevent flap gate from properly functioning and slide gate won't close due to sediment build up. Crossing has been downgraded from Urgent to Non-Urgent due to no pipe or levee integrity issues observed during the site visit. Need to contact owner to determine status of crossing. If crossing is no longer in use owner will need to coordinate with CVFPB to properly abandon or remove according to Title 23 requirements. (O. Magana - DWR UCIP)10/01/2013 Soil and debris prevent flapgate from proper function. Slide gate won't close completely due to sediment buildup. CMP riser needs cover. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 24-inch steel pipe through levee, 11.6 feet below crown. Concrete headwall on the landside (LS) end. Concrete "U" headwall and flap gate located on the waterside (WS) end. Slide gate in 60-inch corrugated metal pipe (CMP) riser is located on the WS slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.23), Drawing No. 7-4-1784].
FS Date: 11/18/2016

LM Start	5.19	Rating **	M	Issue No.	209 (cont)
LM End	5.19	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_SP_2018_51336_36821.jpg



Flapgate in Concrete headwall on WS toe under tree.

Photo 3 of 3 : UCIP_SP_2018_51336_36820.jpg



Concrete headwall at inlet on LS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.22	Rating **	U	Issue No.	52
LM End	5.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.436393 °	37.436393 °
				-121.036296 °	-121.036296 °
DWR ID	DWR_RD1602_01_s_2018_52				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent hole on waterward slope.					

Photo 1 of 1 : SP_2018_RD1602_110_52_20180323_00108.jpg



Looking at rodent hole and erosion around rodent hole on waterward slope.

LM Start	5.23	Rating **	A/W	Issue No.	210
LM End	5.23	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.436246 °	37.436246 °
				-121.036193 °	-121.036193 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21665 DS_ID:20209 EP_NO: 8192 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 1 of 2: 36-inch by 36-inch reinforced concrete box drainage culvert through the levee, 15.8 feet below the crown. Slide gate in a 6-foot by 7-foot concrete surge box on the waterside (WS) slope. 36-inch concrete pipes buried on both sides of the levee and connected to the reinforced concrete box culvert. Constructed through the levee section. (two 36-inch by 36-inch culvert [HLM 5.27] authorized under Automatic Board Order (ABO) issued as Permit No. 8192, 1972 - Stanislaus County). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.27), Drawing No. 7-4-1784]. FS Date: 10/1/2013					

Photo 1 of 2 : UCIP_SP_2018_21665_36829.jpg



Shed with slide gate in Concrete riser on WS shoulder.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.23	Rating **	A/W	Issue No.	210 (cont)	
LM End	5.23	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.436246 °	37.436246 °	
				-121.036193 °	-121.036193 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:21665						
DS_ID:20209						
EP_NO: 8192						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments:						
FIELD_STRUCT_DESC: 1 of 2: 36-inch by 36-inch reinforced concrete box drainage culvert through the levee, 15.8 feet below the crown. Slide gate in a 6-foot by 7-foot concrete surge box on the waterside (WS) slope. 36-inch concrete pipes buried on both sides of the levee and connected to the reinforced concrete box culvert. Constructed through the levee section. (two 36-inch by 36-inch culvert [HLM 5.27] authorized under Automatic Board Order (ABO) issued as Permit No. 8192, 1972 - Stanislaus County). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.27), Drawing No. 7-4-1784].						
FS Date: 10/1/2013						

Photo 2 of 2 : UCIP_SP_2018_21665_36828.jpg



Likely risers for pipe off LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.24	Rating **	A/W	Issue No.	212
LM End	5.24	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.436129 °	37.436129 °
				-121.036065 °	-121.036065 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21672					
DS_ID:20210					
EP_NO: N/A					
Repair Type: No Action Needed					
Crossing Status: Found					
UCIP Comments:					
FIELD_STRUCT_DESC: 30-inch by 30-inch reinforced concrete box drainage culvert through the levee, 12.9 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) slope. Concrete discharge boxes on both ends. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784].					
FS Date: 10/1/2013					

Photo 1 of 3 : UCIP_SP_2018_21672_36848.jpg



Slidegate in concrete riser on WS shoulder.

LM Start	5.24	Rating **	A/W	Issue No.	212 (cont)
LM End	5.24	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_SP_2018_21672_36847.jpg



Concrete outlet on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.24	Rating **	A/W	Issue No.	212 (cont)	
LM End	5.24	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.436129 °		37.436129 °
				-121.036065 °		-121.036065 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:21672 DS_ID:20210 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 30-inch by 30-inch reinforced concrete box drainage culvert through the levee, 12.9 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) slope. Concrete discharge boxes on both ends. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784]. FS Date: 10/1/2013						

Photo 3 of 3 : UCIP_SP_2018_21672_36846.jpg



Concrete inlet on LS toe.

LM Start	5.29	Rating **	U	Issue No.	75
LM End	5.91	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.435555 °	37.432716 °
				-121.035362 °	-121.026134 °
DWR ID	DWR_RD1602_01_s_2012_75				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 2 : SP_2018_RD1602_110_75_20180307_00046.jpg



Vegetation was found on the waterside slope of the levee looking upstream during fall 2016 inspection.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.29	Rating **	U	Issue No.	75 (cont)	
LM End	5.91	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.435555 °		37.432716 °
				-121.035362 °		-121.026134 °
DWR ID	DWR_RD1602_01_s_2012_75					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						

Photo 2 of 2 : SP_2018_RD1602_110_75_20180323_00112.jpg



Looking at upstream at dense vegetation on waterward slope. (Spring 2018)

LM Start	5.35	Rating **	M	Issue No.	61
LM End	6.22	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.434732 °	37.429165 °
				-121.035088 °	-121.029682 °
DWR ID	DWR_RD1602_01_s_2012_61				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : SP_2018_RD1602_110_61_20180307_00037.jpg



Vegetation was obstructing the view of the landside of the levee.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.46	Rating **	M	Issue No.	213
LM End	5.46	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.433646 °	37.433646 °
				-121.033846 °	-121.033846 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21674 DS_ID:20211 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 12-inch drainage pipe of an unknown material through the levee, 6.9 feet below the crown. Flap gate on the waterside (WS) end. Could not locate, March 1984. (Reclamation District No. 1602). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.50), Drawing No. 7-4-1784]. FS Date: 10/1/2013					

Photo 1 of 1 : UCIP_SP_2018_21674_36854.jpg



Pipe and flapgate visible on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	03/13/2018 03/13/2018	Richard Willoughby

LM Start	5.72	Rating **	M	Issue No.	214 (cont)	
LM End	5.72	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.433003 °	37.433003 °	
				-121.029346 °	-121.029346 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51337 DS_ID:20212 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent flap gate is functional. Recommend clearing dense vegetation from WS and LS slopes. (O. Magana - DWR UCIP)10/01/2013 Flapgate has minor blockage preventing gate from fully closing. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 30-inch square reinforced concrete box culvert through levee, 9 feet below crown. Slide gate in concrete surge box is located on the waterside (WS) slope. Concrete "U" headwalls are located on both the waterside (WS) and landside (LS) ends. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784]. FS Date: 11/18/2016						

Photo 3 of 3 : UCIP_SP_2018_51337_36876.jpg



Concrete U-shaped headwall on LS toe.

LM Start	6.13	Rating **	U	Issue No.	86
LM End	6.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.430181 °	37.430181 °
				-121.028679 °	-121.028679 °
DWR ID	DWR_RD1602_01_s_2018_86				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Cactus blocking view of waterward slope.					

Photo 1 of 1 : SP_2018_RD1602_110_86_20180323_00113.jpg



Looking south at dense cactus on waterward slope.

* Location
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

** Rating
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement